



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,386	02/12/2004	Konstantinos Chondroudis	SMX 3152.1 (2002-110R1)	4581
321	7590	02/23/2006	EXAMINER	
SENNIGER POWERS ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102			HAILEY, PATRICIA L	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/777,386	Applicant(s) CHONDROUDIS ET AL.	
	Examiner Patricia L. Hailey	Art Unit 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 19-37 and 39-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 19-37 and 39-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 10, 2006, has been entered.

Additionally, the Amendment after Final Rejection, dated January 3, 2006, has been entered as a result of the request for continued examination. In this amendment, claims 19-23, 28, 29, 31, and 40 have been amended, claim 38 has been canceled, and new claims 55 and 56 have been added.

Claims 1-15, 19-37, and 38-56 are now pending in this application.

Claim Objections

2. Claim 1 is objected to because of the following informalities:

In line 4 of claim 1, the word "meta" should be "metal", as shown in Applicants' claims as of July 20, 2005.

Appropriate correction is required.

Double Patenting

3. *Claims 1-15, 19-37, and 39-56 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7, 10-16, 18-23, 31-34, 36, 38, 39, 42, and 44-46 of copending Application No. 10/777,482.*

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in the instant application are directed to a method for forming a supported metal-containing powder, wherein a dispersion of a particulate support in a solution (which comprises a solvent and a dissolved metal) is formed, subjected to heat removal to precipitate the dissolved metal onto the particulate support, and separated from the solution to yield the supported metal-containing powder, whereas the claims in the '482 application are directed to a method for forming combinatorial libraries of supported metal-containing powders, said method comprising basically the same steps as recited in the instant application.

In short the difference between the respective sets of claims is the preparation of only one dispersion, versus a "plurality of dispersions" (see, e.g., claim 1 of the '482 application).

The concept of duplication is not patentable. St. Regis Paper Co. v. Bemis Co. Inc., 193 U.S.P.Q. 8, 11 (7th Cir. 1977). While this decision relates to the duplication of parts, there is no reason why such duplication cannot be extended to a process step.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

This double patenting rejection also takes into consideration the filing of a Preliminary Amendment in the copending application on February 12, 2004.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under

37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. *Claims 1-3, 7, 8, 14, 15, 19-24, 26-30, 47, 48, and 50-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over French Patent No. 2,315,318 (hereinafter "the French Patent"), Applicants' submitted art.*

The French Patent teaches a process for preparing an electrochemical catalyst, wherein a support is impregnated with a solution of a metal salt under vigorous agitation to obtain a paste, the paste is frozen by immersion into liquid nitrogen and then dried by freeze-drying to obtain a fine powder, and the powder is reduced under a hydrogen atmosphere at a reduction temperature of 150°C-600°C, followed by passivation and cooling of the powder, preferably under an inert atmosphere by the controlled introduction of oxygen. See the paragraph bridging pages 1 and 2 of the French Patent.

Examples of the support include finely divided carbon; examples of the metal salt include nitrates, as well as any salts soluble in an aqueous medium or solvents such as methanol or acetone, of metals such as platinum, ruthenium, palladium, rhodium, and iridium. See page 2, lines 3-28 of the French Patent.

Although the French Patent does not specifically state that, during the freeze-drying step (considered to read upon Applicants' "separating...by freeze-drying"), that

"a portion of the frozen solution is allowed to melt", it would have been obvious to one having ordinary skill in the art at the time the invention was made to expect that, during the prior art's steps of reducing at a temperature of 150°C-600°C, or even prior to the reduction step (i.e., after the freeze-drying step), the powder would exhibit some degree of melting due to the reduction temperature, or even due to the change in temperature after freeze-drying is completed.

Response to Arguments

Applicants' remarks filed on January 3, 2006, have been carefully considered.

With respect to the French Patent, it is considered that although this reference does not "suggest melting during freeze drying", Applicants have not clearly shown the criticality in the claimed step of allowing the frozen solution to melt during freeze-drying (step (iii) of claim 1). The Examiner maintains the position that, between the freeze-drying and immediate reduction steps, as disclosed in the French Patent, as well as during Applicants' claimed step (iii), some melting occurs; said melting is considered to be within the purview of "allowed to melt". Further, it cannot be determined how, during freeze-drying, any melting can take place.

The provisional double patenting rejection has been maintained pending the examination of the claims in the copending 10/777,482 application. Additionally, any claims rejected in the double patenting rejection but not rejected by the French Patent are not automatically allowable. At the very least, the indication of allowable subject

matter in these claims should be and has been held in abeyance, based on the possibility that any and/or all claims be amended or canceled, and pending the status in the claims of the copending '482 application.

For these reasons, Applicants' arguments are not persuasive.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Conclusion

9. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date

Art Unit: 1755

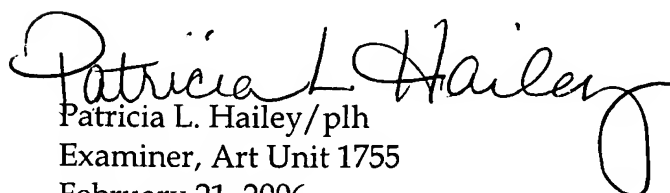
of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

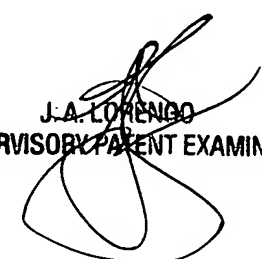
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (571) 272-1369. The examiner can normally be reached on Mondays-Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 1700 Receptionist, whose telephone number is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Patricia L. Hailey/plh
Examiner, Art Unit 1755
February 21, 2006


J.A. LORENZO
SUPERVISORY PATENT EXAMINER